

broken off where their diameter was as much as 4 feet. From examination of the age of trees destroyed, the observer concluded that this was the most destructive storm within 200 years (5).

The Miami Beach record therefore stands as the highest recorded by automatic instruments in the United States.

Engineers and others seeking to apply these velocities to structural problems will find information concerning the average pressure tending to overturn a model in Scientific Paper of the Bureau of Standards No. 523 (6).

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DESTRUCTIVE GUST AT JUPITER, FLA., FOLLOWING THE MIAMI HURRICANE

By H. B. BOYER, Meteorologist, In charge

(Weather Bureau office, Key West, Fla., October 4, 1926)

Attention is called to a freakish gust of wind of hurricane force that was experienced at Jupiter, Fla., on September 18, during the tropical storm of that date. This gust practically demolished the naval radio station at that place.

The gust that caused so much damage to the Jupiter radio station was unique in that its destructive force was confined to a narrow and well-defined path running from south-southeast to north-northwest with a width of about 400 feet.

A remarkable feature of this gust was that it occurred during a recrudescence of the storm and after the center

had crossed the Florida Peninsula and was well off the west Florida coast.

Blowing with hurricane force from the northeast and east throughout most of Friday night, the wind veered to southeast and south on Saturday, gradually diminishing in velocity to a whole gale. This was in the natural order of events in a tropical storm whose center was moving on a westerly track to the southward of a given point. In all tropical hurricanes, within the area of hurricane winds, the most destructive are those that occur after the center has passed the gusts being of greatest violence and force, but diminishing in frequency and strength as the center recedes. At Jupiter there was a renewal of the storm to hurricane force during Saturday afternoon, the terrific gust that put the radio station out of commission occurring between 8 and 9 p. m.

* * * In the area of great destruction one anchor of the 200-foot north tower containing 12 cubic feet of concrete was completely pulled out of the ground. Part of the roof of the dormitory was blown southward and deposited on the pier. This, in all probability, was done by an eddy, as there was no other evidence that the gust partook of the nature of a tornado.

E. C. Seibert, public works officer, communicates the following:

It appears as though the majority of the damage at Jupiter was done in a very short space of time, 20 or 30 seconds, or even less. Shortly after 8 p. m., September 18th, a very sudden and marked increase in the wind velocity was noted by the personnel, and before the operator in the operating building could get out, the roof was off and the towers were down. No one witnessed the actual falling of the towers. From the manner in which brush and trees were knocked down, and from its effect on various structures, it appears that this sudden volume of wind was very narrow in width, perhaps only about 400 feet. It seems to have run just a few degrees west of north, wrecking the boathouse and carrying away the operating house roof, north and northeast towers, garage, etc. An old empty wooden tank on a comparatively light steel tower on the lighthouse reservation (to the east) was uninjured, although the tank, it is understood, is not fastened down to the top of the tower except by the effect of the riser pipe from the pump. This tank is only about 500 feet east of the operating building. In other words, the eastern extremity of this cyclonic gust seems to have been about 250 feet east of the operating house, while its western boundary was probably 150 feet. Also, the quarters on top the hill, to the east, and known as the old Weather Bureau House, was not materially damaged.

THE HURRICANE AT TURKS ISLAND, SEPTEMBER 16, 1926

By GEORGE GOODWIN

(Turks Island, West Indies)

At the 8 a. m. readings the weather had taken a very unfavorable change—barometer tending to fall and wind increasing and dropping every few minutes.

On receipt of advice from the bureau that the storm would pass over or near Turks Island, every available means was used to spread the information, that all necessary precautions might be taken. Since the barometer was falling rapidly a special observation was taken at 10:20 a. m. and all particulars sent to the bureau. Wind was then blowing at 36 m. p. h. from NW, with very heavy sea swell. Rain falling. At 1 p. m. the velocity of the wind had increased to 100 m. p. h. NW., with a very heavy sea swell, the intensity of the storm gradually increasing. A special observation was sent to the bureau. At this hour the office was flooded and the sea breaking over the top, carrying all before it. Huge blocks of cement weighing a ton being washed around as if mere pebbles. At 1:55 the storm had reached such intensity as to indicate that everything would be demolished. Wind then about 150 m. p. h., unroofing the

office buildings, the roof of corrugated iron being carried about one mile inland. The sea swell at times was well above the window sills and before it could recede was caught by the next swell, the sea reaching inland for about three-quarters of a mile. The rain and sand at this time were blinding. The wind was so intense that the prickles from the prickly pear were blowing about like dust, being stripped off as the wind would strip a tree of its leaves.

At 5 p. m. it was deemed advisable to take shelter at the commissioner's residence. It took fully 40 minutes to cover a distance of less than a quarter of a mile; after a fierce fight we managed to reach our destination.

At 9:30 p. m., the storm having abated somewhat, the wind suddenly veered round to SE., still of a velocity of about 80 m. p. h.

The instruments of the bureau suffered badly. Cups of the anemometer were found half a mile away. The shelter with the thermometers was blowing around as if a sheet of paper. When eventually picked up it was